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09/18/2009 12:52 PM

To

US EPA RECORDS CENTER REGION 5



402943

Subject Re: Draft technical memo on proposed bank repairs in
Plainwell No. 1TCRA

Steve - I'll offer some comments on behalf of DNR.

Based on what we observed on Wednesday on our site review, the river bank is composed of a sand layer (at current water elevation) overlaid with a dense, thick layer of cohesive material. The softer sand is being eroded into the excavated channel, and the overburden is breaking off and calving into the water, leaving a vertical slope. The toe/sand layer needs to be protected since we don't expect further excavation of the overburden, which of course is already planted and supporting young trees. I would prefer we not lose the vegetation that has already established on this bank.

I concur that corrective action should occur as soon as possible this year and not wait to see how things may change over the winter and early spring. I also concur that the cross vanes would not be suitable for a variety of reasons. Unfortunately, to create a stable bank at this location as soon as possible will require stone protection at the toe. I concur with your recommendation that a coir log be placed on top of the stone and suggest you consider placing it at the interface between the clay and sand layers. This should allow vegetation to establish in the coir log with roots extending into the sand. I don't know whether this corresponds to your proposal to place the coir log at the prism-out median water elevation but it should be close.

Given the difficulties of establishing a stable bank within the limits of the former impoundment area, I suggest we discuss the long-range corrective actions that are reasonable if problems continue to arise over the course of the winter. I would also appreciate a summary of your assessment to date of the erosion rate of the prism material. Specifically when you project that the prism material will be "80% eroded" - the goal for termination the monitoring effort. It appears that the prism material at mid-channel may be contributing to erosive forces against the river banks.

Attached are a few illustrative photos.

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>>> "Garbaciak, Steve" <Steve.Garbaciak@arcadis-us.com> 09/15/2009 10:53 AM
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Attached is a technical memo describing alternatives and a recommended approach for addressing the bank issues in removal areas 8 and 9B at the Plainwell No. 1 TCRA. We would like to discuss this information at tomorrow's stakeholder meeting.

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Plainwell Sept 09 012.jpg Plainwell Sept 09 011.jpg Plainwell Sept 09 017.jpg